

IN THE CLAIMS

Please cancel claims 1-12 without prejudice. Claims 13-32 are new.

Please amend the following of the claims which are pending in the present application:

1-12. (Cancelled)

13. (New) A system for analysing energy usage on an energy supply network which includes a number of energy sources supplying energy to the network, and a number of energy consumers connected to the network, the system including a plurality of meters on the network which monitor energy usage on the network, the meters supplying data to data processing apparatus which aggregates the data so as to provide an indication of current total energy usage, and which stores data so as to permit the retrieval of historical energy usage for a time in a year, wherein the data processing apparatus further compares current total energy usage for a particular time in a year with a standard total energy usage for that time in a year, based on historical energy usage, and generates an index which indicates the difference between the current total energy usage for that time in a year and the standard energy usage for that time in a year.

14. (New) A system as claimed in claim 13, wherein the standard total energy usage for a time in a year is the average over a number of years of historical energy usage for that time in a year.
15. (New) A system as claimed in claim 13, wherein the particular time in a year is a period of time.
16. (New) A system as claimed in claim 15, wherein the period of time is a rolling period of predetermined length.
17. (New) A system as claimed in claim 16, wherein historical energy usage data is available for fixed periods of time, and standard total energy usage for a rolling period of time which straddles two of the fixed periods of time is calculated by combining values from the two fixed periods of time in a ratio according to the length of each fixed period of time which is covered by the rolling period of time.
18. (New) A system as claimed in claim 13, wherein a time interval is required to complete the acquisition of data from all of the meters, and once the data has been acquired from all of the meters and aggregated, subsequent aggregate totals are calculated at intervals substantially shorter than said time interval using the latest data received from all of the meters.

19. (New) A system as claimed in claim 18, wherein said subsequent aggregate totals are calculated upon receipt of updated data from any meter.

20. (New) A system as claimed in claim 18, wherein subsequent aggregate totals are calculated at predetermined intervals using all updated data received from meters which has been received during the interval since the previous calculation of an aggregate total.

21. (New) A system as claimed in claim 18, wherein upon calculation of a subsequent aggregate total, there is also calculated an integrated estimate of current total energy usage over a rolling period of time of predetermined length.

22. (New) A system as claimed in claim 21, wherein historical energy usage data is available for fixed periods of time, and standard total energy usage for a rolling period of time which straddles two of the fixed periods of time is calculated by combining values from the two fixed periods of time in a ratio according to the length of each fixed period of time which is covered by the rolling period of time.

23. (New) A system as claimed in claim 13, wherein the network is managed by a network operator which contracts with a number of different traders comprising

producers who supply energy to the network, and retailers who sell energy to the consumers.

24. (New) A system as claimed in claim 23, wherein the index provides an indication of the degree of imbalance between supply and demand on the network to the producers and retailers, and the index is used by retailers and producers in contracting for production of energy.

25. (New) A system as claimed in claim 23, wherein the index provides an indication of the degree of imbalance between supply and demand on the network to the retailers, and is used by retailers to hedge capacity from producers.

26. (New) A system as claimed in claim 13, wherein the index is used to assist in physically balancing the network in terms of production and consumption of energy.

27. (New) A system for reducing the consequences of imbalances in an energy network in which energy retailers contract for the supply of energy from energy producers, the system comprising the steps of using a commonly applicable index by producers and retailers to give an indication of the degree of imbalance on the network, and using the index so that retailers and producers can contract for

production, and retailers can hedge capacity from producers, in such a way as to assist in physically balancing the network.

28. (New) A system as claimed in claim 27, wherein the index is used to influence the volume and price of traded options concerning the purchase of energy by retailers from producers.

29. (New) A system as claimed in claim 27, wherein data concerning current energy usage on the network is supplied to data processing apparatus which aggregates the data so as to provide an indication of current total energy usage, and which stores data so as to permit the retrieval of historical energy usage for a time in a year, wherein the data processing apparatus further compares current total energy usage for a particular time in a year with a standard total energy usage for that time in a year, based on historical energy usage, and generates said index as an indication of the difference between the current total energy usage for that time in a year and the standard energy usage for that time in a year.

30. (New) A system as claimed in claim 29, wherein:

- (a) the standard total energy usage for a time in a year is the average over a number of years of historical energy usage for that time in a year; and
- (b) the particular time in a year is a rolling period of time of predetermined length.

31. (New) A system for analysing energy usage on a network which includes a number of energy sources and a number of energy consumers, the system including a plurality of meters on the network which monitor energy usage on the network, wherein the meters supply data to data processing apparatus which aggregates the data so as to provide an indication of current total energy usage, wherein data is received from different ones of the meters at different points in a period of time, and once the data has been received from all of the meters at the end of that period of time and aggregated, subsequent aggregate totals are calculated at intervals substantially shorter than said period of time, using the latest data received from the meters.

32. (New) A system as claimed in claim 31, wherein said subsequent aggregate totals are calculated upon receipt of updated data from any meter.